

ART. XVI.—*Descriptions of New Species of Araneæ.*

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Fam. THERAPHOSIDÆ.

Gen. NEMESIA, Latr.

Nemesia kirkii, sp. nov.

Fem.—Ceph.-th., long, 9·1; wide, 7; facial index, 5. Abd., long, 14; wide, 9·5. Total length, including falces, 22·3. Legs, 4, 1, 2, 3 = 22·8, 21, 20·4, 19·5 mm.

Cephalothorax orange-ochreous, median stripe brown, narrow, occurs on occiput; ocular eminence brown. With the exception of a few black hairs on lateral margins and medial line of caput, almost devoid of hairs. Length equal to the tibia, metatarsus + tarsus of fore-leg, breadth to patella + tibia; oval, slightly compressed at caput, truncate at each end; one-fifth broader in front than behind; pars cephalica convex; depth of *clypeus* about equal to space occupied by central pair of eyes—anterior row; pars thoracica depressed; fovea circular, deep; caput and radial striae well defined; profile-contour ascends from petiolum to frontal margin with a double arch, at an angle of 30deg.

Eyes grouped on a tolerably well developed, elliptical eminence; viewed from above represent procurved and recurved lines. Posterior row moderately procurved; anterior slightly recurved; lateral pairs oval, largest of eight, posited obliquely—less than one-third of their greater diameter apart, on somewhat collar-like elevations; posterior centrals approximate to an oval form; about one-third smaller than side-eyes; placed a trifle in advance, and separated from them by an interval slightly shorter than that which divides the latter pairs from each other; anterior centrals circular, only dark eyes of the set; sensibly exceed hind-centrals in size; divided from each other by an interval equalling three-fourths their own diameter; separated from hind-median pair by an eye's radius, and from laterals of same row by a visibly-shorter interval.

Falces purple-black; moderately furnished with black hairs and bristles; project abruptly forwards; profile-contour represents a somewhat even curve; stout; length equals facial index.

Maxillæ acutely conical, enlarged at insertion of palpi, which are articulated near the extremity; latter point bent outwards; divergent; inferior slope of basal half studded with small papillæ.

Labium broad-oval, emarginate; barely one-fourth length of maxillæ; covered with small papillæ. Organs have a yellow-brown tone; moderately haired.

Sternum dark coffee-brown; tolerably well furnished with hair; obovate.

Legs brownish-tan colour, more or less suffused towards extremities with olive-brown; longitudinally striped with same shade. Tolerably stout, do not differ much in length or strength; fairly well armed with black hairs and fine bristles, both of which occur on the darker tints. Spine armature, 1st leg, patella 1 on inner side; tibia 1 on either side, 1, 1 at extremity; metatarsus 1 central spine beneath; 1, 1 at apex; 2nd, patella 1 inner aspect; tibia 1 beneath, 1, 1, 1 at extremity; 1, 1 on inner side; metatarsus 1 spine on inferior aspect; 1, 1, 1 at articulation with tarsus; 3rd, patella 1 inner side; tibia 1 centre, 1, 1 apical, inferior surface; metatarsus 8 spines, mostly on second half; 4th leg, patella 1 inner side; metatarsus 13. Claws strong; superior pair 1st leg well curved; 12 open teeth—1, 2, 3, 4, from base, smallest and closest; 5-8 nearly equal in length; 6, 7 longest and strongest; 4 terminal teeth of medium strength. Inferior claw well curved, stout, 4 close, fine teeth.

Palpi colour and armature of legs. Palpal claw strong, well curved, 7 stout, open, comb-teeth.

Abdomen elongate-obovate; integument somewhat coarse, studded with small papillæ, projecting fine bristles—mostly short, yellowish; light olive-brown, densely suffused with dark-brown; inferior surface resembles superior. Vulva consists of two transverse labiæ; upper semicircular, projects over the rima genitalis. Superior pair of spinners 6.5mm. in length.

This fine species of trap-door spider, which is, as far as I am aware, new to science, was captured near Wellington. I have much pleasure in naming it in honour of *Mr. T. Kirk, F.L.S.*, the discoverer, who, in a short note that accompanied the specimens, stated that they were found amongst stones, and that most of the nests were furnished with two doors. It is to be hoped that Mr. Kirk will find time to write a descriptive account of the nests and their surroundings.

Fam. THERIDIIDÆ.

Gen. THERIDIUM, Walck.

Theridium gibbosa, sp. nov.

Mas.—Ceph.-th., long, 1.1. Abd., long, 1.3. Legs, 1, 2, 4, 3 = 7.5, 5.8, 4.5, 3 mm.

Cephalothorax yellow-brown; medial stripe fuscous, obscure on caput. Ovate; lateral compression of cephalic region

moderate; roundly truncated; frontal index more than half lateral; fovea subcircular, fairly deep; radial and caput striæ well defined; *clypeus* projects moderately, height visibly exceeds depth of eye-area; profile-contour arched, posterior slope very abrupt compared with anterior incline.

Eyes large; posterior row procurved; middle pair on lake spots, separated by about an eye's radius, removed by scarcely their diameter from lateral pair; anterior row recurved, centrals dark, perceptibly smaller than hind pair—form a square with them; lateral eyes about one-fourth smaller than hind-centrals, posited contiguously on prominent, lake-coloured tubercles.

Falces and cephalothorax concolorous; linear, about twice as long as broad, inclined perceptibly forwards.

Maxillæ pale stone-colour, dusky clouds; linear, rounded, basal third turgid; slightly inclined towards each other.

Labium similar in tone to maxillæ, about one-third their length; oval.

Sternum normal stone-grey shade; cordate.

Legs pale slaty-grey; a slate-coloured, wide, vein-like streak runs through their entire length; almost glabrous; few black, bristle-like spines.

Palpi pale metallic stone-colour; humeral joint of somewhat even breadth, about one-fourth longer than two following articles together; armed with few spine-like bristles; cubital short, cup-shaped; radial joint large, crateriform, deeply cleft above; *pars digitalis* well developed; basal fourth inserted within the cup-shaped cavity of penultimate article; lamina sparingly haired, assumes a yellowish tone towards extremity; ovate curves round lower aspect of bulb; prolonged in a stout, trunk-like form, abscinded, apex concave; genital bulb metallic-grey; membranous, convex above, deeply cleft at fore-end; the cutaneous fold of the superior (upper) extremity is down-curved, somewhat revolute; inferior projection about same length as superior, wide, tapering, extremity rapidly acute; the brownish beading of fore-half, which is bent forwards, forms a continuous line with the bead bordering the deeply sinuous membranous folds of the lower part of *bulbus*. Within the bulb, just beneath the above-mentioned projections, are two dark, easily perceptible, subprocesses.

Abdomen ovate in outline, sides deep; a depressedly conical tubercle projects at the verge of the abrupt posterior slope. Ground-colour yellowish-stone, sides have a dull metallic lustre; folium exhibits no very determinate limits; spotted with fair-sized, white, lobate flecks; a V-shaped figure composed of confluent flecks extends from apex of tubercle to base of abdomen, enclosing an unspotted area, and bordering the fuscous, linear petiole; central third traversed by two lines

composed of six fuscous, small conoid papillæ, three on each side of the V-shaped dorsal mark; a dusky, interrupted, pencilled line connects the tubercle with spinners. Ventral shield linear, brownish.

Single specimen, *Powell* collection.

Most of the species described in this short paper were contained in the collection of the late Dr. L. Powell, F.L.S., which has been sent to me for determination by Captain F. W. Hutton, Curator, Canterbury Museum.

Gen. LINYPHIA, Latr.

Linyphia mundenia, sp. nov.

Mas.—Ceph.-th., long, 2·1; broad, 1·6. Abd., long, 2·2; broad, 1·4. Legs, 1-4, 2, 3 = 5, 4·5, 4 mm.

Cephalothorax deep orange-colour, suffused, more especially over cephalic part, with lake; normal grooves well defined by streaks of same shade; almost glabrous. Pars cephalica slightly constricted, round-pointed, lateral index surpasses frontal by one-fourth; *clypeus* nearly vertical, height fully equal to half that of facial space; thoracic indentation deep, longitudinal; caput and radial striæ shallow. Profile-line rises from frontal margin rather steeply, descends with a slight incline from centre of occiput to limit of caput; from thence falls, at an angle of 25 degrees, to petiolum.

Eyes barely of medium size, on black spots; posterior row moderately procurved, centre pair separated from laterals by an eye's diameter, rather more than one-half that interval from each other; anterior row sensibly recurved—nearly straight; median pair much the smallest of eight; dark, removed from one another by an interval equalling their radius, and from side-eyes by nearly their space; laterals exceed hind-centrals in size by one-fourth, posited on moderately developed elevations, contiguous.

Falces have the tints of caput, conical, divergent, inwardly-inclined, quite as long as tarsus of first leg.

Maxillæ light amber-colour, sublinear, pointed, inclined towards each other.

Labium yellowish, stained with lake, oval.

Sternum deep-fulvous, lake tinge, broad-cordate.

Legs light ochreous-yellow, faint indications of olive-green annulations; hairs and spines yellowish, latter tolerably strong on posterior pairs.

Palpi, light ochreous-yellow; pars humeralis gradually dilated, about one-fourth longer than cubital and penultimate articles together; pars radialis campanulate, rather longer and much stouter than cubital joint; clava rather exceeds humeral joint in length; lamina ovate, pointed, base produced

into a lake-coloured process of somewhat uniform breadth, curved upwards and backwards. Genital bulb represents principally a series of membranous folds and processes, which have yellowish and brownish-yellow tints; bulb viewed from outer sides exhibits a conoid outline, projects at nearly a right-angle to lamina, occupies about one-half its length; consists of four folds, the upper or basal fold is produced into a triangular enlargement in front, second projects only slightly beyond the first, third and fourth of nearly equal width, together perceptibly narrower than upper fold; the fore-extension of terminal fold differs from that of basal membrane inasmuch as the apex of it is drawn out and curved backwards. Two strong apophyses occur beneath lamina, springing from base of bulbus, both membranous, wide, tapering, inner shortest, dark, spiral; crossed outwardly by the larger and pale apophysis, whose apex reaches nearly to extremity of clava. A third apophysis, which has a yellowish colour, springs from near centre of inner side, base stout, tapers rapidly from first third into a thin flexible bristle, spiral (plane), curved backwards.

Abdomen elongate-oviform; in colour light-fuscous, flecked with spots of a paler tone; folium ovate, covers most of dorsum, approximates to olive-brown, lake-stains; edge wide, olive-green, undulating, partially encloses on fore-half an ovate space; exhibits on posterior half a series of tooth-like dilatations projecting inwards. Inferior half of lateral margins mottled with dark-brown.

Single example, *Powell* collection.

Linyphia decolora, sp. nov.

Fem.—Ceph.-th, long, 2; wide, 1·2. Abd., long, 3; wide, 2·5. First and fourth pairs of legs about equal, 5·5. Second pair, 4·4, slightly exceeds third.

Cephalothorax amber-colour, stained with lake and olive-green; almost glabrous. Cephalic part roundly truncated, facial index sensibly shorter than lateral; height of *clypeus* nearly equal to one-half the depth of facial space; thoracic indentation longitudinal, deep; radial and caput striæ well defined; profile-contour rises from the petiolum at an angle of 45 degrees; runs with a perceptible incline to centre of occiput, from thence dips more abruptly to frontal margin.

Eyes of fair size, seated on fuscous spots; posterior row procurved, intervals separating middle pair from each other and laterals are about equal to eye's radius and diameter respectively; anterior row recurved, median pair much the smallest of eight, one-fourth of an eye's breadth apart, removed from side-eyes by a space fully equalling their own diameter; laterals have the opalescence of hind-centrals, exceed

them in size by one-fourth; posited on moderately low elevations, contiguous.

Falces yellowish-amber colour, figured with olive-green, display a conspicuous pale patch; inwardly inclined, of somewhat even breadth to fore-third, which is bent rather abruptly outwards.

Maxillæ pale-brown, basal half red-brown, clouded with a dusky shade; of somewhat even breadth, pointed, inclined over *lip*, which is tinted with deeper shades; subcircular, margins turgid.

Sternum deep yellow-brown, dappled with dark-brown; cordate.

Legs creamy-fulvous; femora suffused with a bright fulvous colour; broad, somewhat obscure, central and distal annuli of a similar shade, tinted with green, occur on the femoral, tibial, and metatarsal joints; sparingly armed with pale-yellow hairs and spines.

Palpi, coloration and armature of legs.

Abdomen oviform, projects well over base of cephalothorax; glossy, brownish-cream colour, suffused with rather large, subconfluent flecks of a paler tone; folium has the shade of ground-colour; pattern olive-brown, not very pronounced; fore-half represents a broad, sublinear band with a wide edge, much interrupted on basal slope; produced again, somewhat beneath, into a subcrescentic transverse figure; band exhibits two pairs of coarse, tooth-like dilatations; area enclosed by anterior pair has a somewhat hastate form, is sharply constricted at its junction with posterior part, which is subelliptical, projects a pair of lateral dilatations; contains within a dusky spot of similar form; folium on hind-slope cordate, olive-brown, without very determinate limits, deepens in tone towards the lighter parts, which represent free or coalescing chevrons of irregular form; lateral margins suffused with creamy-olive, marbled with a darker shade. Ventral region pale. *Corpus vulvæ* yellowish, stained with olive-green; subquadrate, elevated; superior area exhibits two ovate, lake-tinted foveæ, bordered by rather turgid costæ, which are prolonged beneath the scapus vulvæ; latter organ short, broad, apex disciform, margins moderately turgid.

Single specimen, *Powell* collection.

Linyphia fucatinia, sp. nov.

Mas.—Ceph.-th., long, 1.5; wide, 1. Abd., long, 1.6; wide, 1. Legs, 1, 4, 2, 3—do not differ much in length; 1st pair 3.7mm.

Cephalothorax rich mahogany-colour, approximating to lake; thoracic region tinged with olive-green. Clathrate; furnished with few short bristles. Pars cephalica prominently

convex, lateral index slightly longer than facial; *clypeus* inwardly inclined, rather shorter than ocular area; thoracic groove longitudinal, moderately deep; radial striæ lake-coloured, sensibly indented. Contour of profile ascends from petiole to occiput at an angle of 25 degrees, representing a double curve, the greater being across occiput.

Eyes on dark spots; posterior row slightly procurved, of nearly equal size; middle pair separated by rather more than an eye's radius, visibly less than their diameter from laterals; anterior row recurved; centrals dark, much the smallest of eight, posited, their radius apart, on a large, black, cordate mark; plainly more than their diameter from side-eyes of same row; lateral pairs have the opalescence of hind-centrals; seated contiguously on dark, tubercular prominences.

Falces dark amber-colour, conical, divergent, directed visibly towards maxillæ, nearly as long as tarsus of second leg.

Maxillæ shade lighter than falx; base greenish-brown; of somewhat even breadth, pointed, inclined towards each other.

Labium fuscous, yellowish margins; semicircular.

Sternum fuscous-lake; clathrate; cordate, prolonged between coxæ of fourth legs.

Legs light-fulvous, faint indications of annuli. Hairs pale-yellow, sparse; sparingly armed with light-coloured spines.

Palpi yellowish-amber tone; humeral joint slightly dilated towards extremity, one-fourth longer than two following articles together; cubital joint somewhat campanulate, projects one slender bristle; radial cup-shaped, rather longer and much stouter than preceding article; pars digitalis about twice as long as penultimate joint; lamina acute-ovate, moderately haired, produced on outer side into a dark, sharply backward-curved process, of fair size; bulbus genitalis yellowish, stained with lake; viewed from outer side globose, somewhat elongated, extremity truncated, margin roundly emarginate; lower part produced into a short, round-tipped process; projecting forwards from within the vase-like bulb is a semi-transparent, stout, pointed process, revolute towards beneath, whose apex reaches nearly to extremity of clava.

Abdomen elongate-oviform; hairs light, short, fine, somewhat sparse; pale olive-yellow, spotted with flecks approximating to cream-colour; folium occupies dorsal area, has a rather deeper tone than ground-colour, specific markings olive-brown, somewhat obscure; basal third bordered and traversed by more or less faint and interrupted lines; central third marked with two transverse bands deepening in shade at extremities; two creamy spots occur between bands; posterior third bounded by dense shading, displays three clusters of confluent creamy flecks, intercepted by a continuous, narrow medial stripe; inferior half of lateral margins olive-brown.

Ventral area exhibits an olive-green, trapezoidal shield, laterally bordered with short, white hairs.

Single example, *Powell* collection.

TEKELLA, gen. nov.

Cephalothorax broad-ovate, nearly as wide as long; compression at caput slight, lateral index short; pars cephalica, viewed from front, conoid; clypeus projecting; height scarcely equals one-half depth of facial space; contour of profile strongly arched, dips at an angle of 40 degrees to petiolum and ocular region. Eyes rather large, fore-centrals dark; posterior row procurved, of about equal size, about twice as far from side-eyes as they are from each other—an interval equalling an eye's radius; anterior row recurved, middle pair more than half size of side-eyes, posited on a tolerably prominent elevation, their own radius apart; removed rather more than their diameter from the pair next to them; perceptibly more than the latter interval from hind-centrals; laterals contiguous, on prominent tubercles. Falces linear, vertical, one-third longer than wide. Maxillæ twice as long as broad at base, gradually contracted, especially second half; curve round lip; apices round-pointed, close. Labium subquadrate, rather wider than long, margin tumid. Sternum cordate, rugose. Legs, 1, 2, 4, 3, tolerably long and slender; hairs sparse; patellæ 1 bristle-like spine; tibiæ 1, 1. Claws slender, few open teeth. Palpal claw fine, few teeth. Abdomen oviform, globose.

Tekella absidata, sp. nov.

Fem.—Ceph.-th., long, 1. Abd., long, 1.4. Legs, 1, 2, 4, 3 = 6, 4, 3.2, 2.3 mm.

Cephalothorax chestnut-brown, studded with depressed papillæ; larger set arranged in radial lines, sparsely armed with spine-like bristles. Broad-ovate, lateral compression at caput very moderate; pars cephalica conoid in outline; clypeus projecting, height visibly less than one-half depth of facial space; striæ fairly well marked, fovea ill-defined; profile-contour strongly arched.

Eyes rather large, with exception of fore-centrals have a pearl-grey lustre; posterior row procurved, median pair about as large as laterals, removed from latter pair by rather more than an eye's interval, and from each other by a space fully equal to their own radius; anterior row recurved, centrals more than half as large as side-eyes; posited, their radius apart, on a tolerably prominent elevation; separated by an interval plainly exceeding their diameter from side-pair, and rather further from hind-centrals; laterals seated, contiguously, on a dark, prominent elevation.

Falces yellow-orange, basal three-fourths stained with

brown-pink; linear, vertical, as long as the pars digitalis of palpus.

Maxilla creamy-brown, dappled; width at base equal to about half length; gradually compressed, especially second half; curved round lip; apices round-pointed, close.

Labium approximates to maxillæ in colour; subquadrate, breadth somewhat surpasses length; margin tumid.

Sternum deep brown-pink; cordate; rugose; exhibits few well-developed papillæ projecting bristles.

Legs very pale-brown, subhyaline; femora of two first pairs light ochraceous; femoral joints have three olive-brown annulations; tibial + metatarsal two; more or less evanescent on two latter articles; hairs light, somewhat sparse; patellæ + tibiæ project respectively 1 + 1, 1 semi-pellucid bristle-like spines. Claws opaque, slender, armed with few open teeth.

Palpi subhyaline, stone-colour; basal rings on humeral radial + digital joints, latter very wide; cubital + radial joints armed with bristles. Palpal claw fine, few teeth.

Abdomen globose-oviform, projects well over base of cephalothorax; ground-colour olive-green, pattern creamy-stone; figure on dorsal region reaches from base to spinners; on basal fourth narrow and interrupted, enlarged and lanceolate on summit of dorsum; on first half of posterior slope the mark is further enlarged, represents a hastate figure, below the latter it runs into a wide band which extends in a continuous stripe round lateral margins of abdomen; contained in the dark ground enclosed by the latter stripe and dorsal marks are three large spots of irregular form. Ventral region occupied by a triangular-cordate shield, margins lobate, wide, creamy-stone; enclose a small, triangular, olive-green area. *Corpus vulvæ* fulvous, light fuscous clouds; represents a large, transverse, somewhat elliptical elevation, centrally drawn out into a semicircular scape, margins beaded, reaches nearly to the superior margin of corpus, which is developed into a palish, wide, membranous, introflexed, emarginate lip. Easily perceptible within cavity of corpus are two lake-brown, pyriform or comma-shaped foveæ.

Two specimens, *Powell* collection.

Fam. EPEIRIDÆ.

Gen. EPEIRA, Walck.

Epeira decorosa, sp. nov.

Fem.—Ceph.-th., long, 3; wide, 2.2. Abd., long, 5; wide, 4.5. Legs, 1, 2, 4, 3=8.6, 8, 7.9, 5 mm.

Cephalothorax yellowish, tinged with pea-green, suffused, more especially over thoracic part and sides of caput, with lake-brown. Hairs white, somewhat sparse. Length equal

to the patella + tibia of a fore-leg, sides moderately rounded, lateral constriction rather sharp; outline of the pars cephalica, viewed from front, semicircular; lateral index nearly equals facial; ocular eminence prominent; *clypeus* in depth visibly exceeds diameter of a fore-central eye; thoracic indentation somewhat diamond-shaped, radial and caput striæ well defined. Profile-contour represents a low arch, with a somewhat uneven outline.

Four central *eyes* form a trapezoid rather wider in front than behind, about as long as broad in front; posterior median pair on oval, greenish spots, sensibly smaller than anterior pair, removed by an interval nearly equal to their space and one-half from laterals, which are one-third smaller than centrals; posited on dark, medium-sized tubercular eminences, separated by an eye's radius.

Falces fulvous, tinge of pea-green; somewhat inwardly inclined, stout, length equal to breadth of ocular area.

Maxille yellowish-brown, base dusky-olive; about as long as broad, pointed, inclined over *labium*, which has an olive-brown colour, oval.

Sternum dark mahogany-brown, cordate, moderate eminences opposite coxal joints.

Legs fulvous, more or less tinged with green, few lake-brown streaks and spots; annuli olive-brown, somewhat obscure; thighs of first and second legs display dark patches on inferior surface. Legs rather slender, moderately armed with fine spines and hairs of a yellowish hue.

Palpi and legs concolorous, armature similar.

The *abdomen* of this example was too much shrunken for accurate description, but the species will be readily recognised by the characteristic form of the genital organ. Abdomen broad-ovate in outline, humeral tubercles fairly-well developed. It was not possible to determine whether the central posterior tubercle was accompanied by a lateral pair. Ground-colour yellowish pea-green, flecked with small lake dots; folium has a deeper shade, margins lake-brown, somewhat ill-defined; a subquadrate figure, with a similar tone, occurs midway between humeral tubercles; petiole broad, tapers towards free end, border lake-brown; lateral margins of abdomen approximate to lake-brown, dappled with yellowish-green. Shield on ventral region greenish-brown, border yellowish, quadrate. *Corpus vulvæ*, light amber-colour, passing abruptly above foveæ into lake-brown; pyriform, fully as broad as long; central third occupied by two rather large foveæ, which have prominent beaded margins, divided by a septum about their equal in breadth; corpus above foveæ triangular, somewhat wrinkled, exhibits two small foveæ; superior margin beaded, drawn out into a short point, which

projects over the rima genitilis; sides of vulva below the dark area covered by sub-free membranous flaps; upper margin of flaps produced into obtuse-pointed processes which curve over each fovea; hind view of corpus discloses a projecting lip, about twice as broad as long, enclosed on either side by a free membrane.

A single specimen of this species was contained in *Dr. L. Powell's* collection.

Epeira powelli, sp. nov.

Fem.—Ceph.-th, long, 3; wide, 2·2. Abd., long, 4·5; wide, 3·2. Legs, 1, 2, 4, 3 = 12·1, 11·2, 10·2, 6·2 mm.

Cephalothorax brownish tan-colour; a short, broad, yellowish, arrow-shaped mark occurs on basal extremity of caput; areolate; hairs white, silky, adpressed, moderately thick. Broad-ovate, lateral margins of caput sharply constricted; cephalic region moderately convex; ocular eminence prominent; lateral index equals space between fore-outer eyes; height of *clypeus* visibly exceeds diameter of an anterior median eye; thoracic depression rather deep; grooves, more especially radial, somewhat shallow; profile-line rises from petiolum at an angle of 45 degrees; falls with slight incline and curve across cephalic part.

Eyes encircled by fuscous rings; form two recurved lines; four centrals nearly form a square; posterior middle pair largest of eight, somewhat elevated; about their own breadth and a quarter apart; removed from side-eyes by an interval sensibly wider than the space they occupy; anterior median pair one-fourth smaller than hind-centrals, separated by an interval equalling their diameter and one-half, rather less than that distance from hind-pair; laterals less than half size of posterior centrals, seated their breadth apart on separate cup-shaped eminences.

Falces fulvous, probably clouded with green; conical, gibbous, inwardly inclined; about as stout as the pars femoralis of second leg; as long as digital joint of palpus.

Maxillæ fulvous, lightly clouded with brown; rather longer than wide; pointed.

Labium darker than maxillæ; subtriangular; apex turgid.

Sternum deep-fulvous, margins clouded; cordate; eminences opposite coxæ moderately developed.

Legs fulvous, pea-green reflections; tolerably stout; hairs light, fine; spines numerous, brownish.

Palpi fulvous; penultimate and digital joints well spined.

Abdomen oviform; yellowish pea-green; folium cordate, lightly suffused with brown; yellowish tint runs into a wide dorsal band on posterior half; petiole broad, margins yellow, sides mottled with brown, passing into reddish-brown on

basal slope. Ventral shield brown. *Vulva* brownish-yellow, prominent, transversely wrinkled, cucullate, drawn out and curved towards the rima genitalis, extremity deeply cleft; margins furnished with a wide, brownish beading. The yellowish, slipper-shaped scapus occupies the space between the rounded projections of the hood, slightly exceeds them in length and breadth.

Single example, *Powell* collection.

***Epeira peronginia*, sp. nov.**

Fem.—Ceph.-th, long, 2·6; broad, 2·1. Abd., long, 4·5; broad, 4. Legs, 1, 2-4, 3 = 13, 11·5, 7·5 mm.

Cephalothorax yellowish, suffused, more especially over cephalic region, with bright pea-green; a fuscous, lance-shaped figure occurs within the thoracic indentation; the brown lines defining the caput striæ are prolonged, and diverge near apex of the above-mentioned mark; marginal band narrow, brown. Hairs whitish, somewhat sparse and coarse. Pars cephalica depressedly convex, sides abrupt; lateral index about equal to breadth of frontal margin; height of *clypeus* fully equal to radius of a fore-central eye; pars thoracica broad-ovate, convex; thoracic indentation acute-ovate, deep; grooves shallow. Profile-contour ascends from petiolum at an angle of 45 degrees; falls with a moderate incline across caput.

Eyes distributed in two rather prominently recurved rows, centrals form a trapezoid widest in front; posterior eyes about one-fourth smaller than anterior pair, separated by about an eye's breadth, an interval which scarcely equals the space dividing them from fore-centrals; laterals one-third smaller than the middle eyes of front row, separated by an interval scarcely equalling their own diameter; fore-eye posited on a strong tubercle.

Falces greenish-brown, clouded with chocolate-brown; linear-conical, distal third curved outwards; project prominently beyond plane of *clypeus*; inwardly inclined.

Maxilla darkish-brown, pale margins; broad, round-pointed.

Labium chocolate-brown, apex pale; acute-oval.

Sternum greenish-brown, margins clouded with dark-brown; angular-cordate; eminences opposite coxal joints prominent.

Legs brownish-yellow, suffused with pea-green; humeral joints marked with central, doubly-serrated, broken, fuscous annulations. Hairs pale-yellow, sparse; spines yellowish, spring from dark sockets.

Palpi resemble legs in colour and armature.

Abdomen angular-ovate, pale-brown, suffused with pea-green; folium tapers from the slightly-developed humeral tubercles to anus. Fore-part of the broad, quadrate petiole

blue-black, contains a conspicuous, pale, oval spot; posterior third exhibits two large, pinkish, pyriform figures, whose acute extremities converge towards each other; pattern of folium consists—more especially on basal third—of a series of velvety, black-brown, more or less elongated spots, encircled by a whitish ground. Amongst the most observable figures are two dark, somewhat crescentic lines, partially enclosing blackish spots near base of the depressedly-conical humeral tubercles; and five pairs of dark figures which occur on the tapering area; anterior pairs hat-shaped, remainder branched; lateral borders and ventral region dappled, spots run somewhat into lines. *Corpus vulvæ* yellow-brown, passing into a chestnut-brown within foveæ; subfree, reniform; margins prominent, retuse, and transversely rugose, inferior side; superior margins revolute, border dark, partially enclose foveæ; septum, close-lying, large, triangular, extends to margin.

Two examples of this pretty species were contained in *Captain T. Brown's* collection from Waikato.

Fam. OXEOPODÆ.

LÆSTRYGONES, gen. nov.

Cephalothorax ovate, lateral constriction slight, moderately convex above, sides slope at an angle of 75 degrees; ocular eminence and clypeus projecting; latter subquadrate, width equals that of second row of eyes, depth equal to about two-thirds of space occupied by first row of eyes; pars cephalica limited by a moderately deep, transverse indentation; thoracic groove longitudinal; striæ of moderate depth; profile-contour rises at an angle of 80 degrees from petiolum, falls with a moderate curve and incline to first row of eyes, from thence dips more abruptly to margin of clypeus. Eyes in four rows; first pair dusky, small, close; eyes of second line far apart, visibly smaller than anterior pair, removed from them by an interval about equal to space occupied by fore-pair; eyes of third line large, scarcely twice their breadth apart, separated from first and second pairs by nearly their own diameter; dorsal eyes furthest apart, seated obliquely on verge of caput; scarcely as large as third pair, form with them a trapezoid nearly as long as broad in front. Falces conical, inclined inwards. Maxillæ dilated, nearly as broad as long, truncated. Labium less than one-half length of maxillæ; similar in form, emarginate. Sternum cordate. Legs, 4, 2, 1, 3, differ but little in length or strength; tolerably stout. Hairs somewhat sparse. Spines long and strong; rather numerous on femoral, tibial, and metatarsal joints. Claws of fourth leg long, slender, moderately curved; teeth close, fine, about twenty,

extend from base to middle of claw. Inferior claw fine, rather sharply bent; two small teeth. Abdomen obovate, subdeplanate.

Læstrygones albiceris, sp. nov.

Fem.—Ceph.-th., long, 1·6; broad, 1·2. Abd., long, 2·5; broad, 1·9. Legs, 4, 2, 1, 3. Fourth, second, and first pairs about 4·5–4·4; third, 3·5 mm.

Cephalothorax light yellow-brown, two blackish stripes run in almost parallel lines from apex of falces to verge of thoracic incline, from thence converge to petiolum; a lightly-pencilled band borders the lateral margins. Hairs very sparse, coarse. Ovate, slightly constricted beyond coxæ of first legs; viewed from above the ocular eminence and *clypeus* are seen to project well forwards; latter subquadrate, as wide as second row of eyes; depth equal to space occupied by first row, less diameter of an eye; profile-line ascends from petiolum at an angle of 80 degrees, moderately inclined and arched to first row of eyes; dip more abrupt across clypeus.

Anterior row of *eyes* straight, darkish, encircled by fuscous rings, divided from each other by a space rather exceeding their own breadth, and from eyes of third row by nearly an equal interval; about one-third size of latter pair; eyes of second line about one-third smaller than fore pair, stained with lake; seated obliquely on a blackish-lake collar; plainly more than their own diameter from eyes of third line; dorsal pair have the bright-amber colour of eyes of third row, scarcely equal them in size; posited obliquely, widely apart on verge of caput.

Falces yellowish, medial stripe dusky; conical, base stout, length equals the intervening space between dorsal eyes; strongly inclined towards maxillæ; project from inner side, near base, a long, strong bristle.

Maxillæ pale-fulvous, clouded; length rather exceeds breadth; dilated, truncated, angles rounded, inclined towards each other.

Labium resembles maxillæ both in colour and form; less than one-half their length; perceptibly emarginate.

Sternum pale-fulvous, lightly clouded with slate-colour; shield-shape, small compared with well-developed coxæ.

Legs brownish-yellow; somewhat sparingly furnished with hairs; spines rather numerous.

Palpi colour and armature of legs.

Abdomen broad ovate; fairly well furnished with white hairs. Light brownish-yellow, lightly clouded with olive-green; flecked with rather large, whitish, lobate spots. *Corpus vulvæ* yellowish-orange; form may be best described as bearing a strong resemblance to the under-aspect of a horse's foot;

a low costa, delineated by a lake border, representing the shoe.

Two specimens contained in the collection of the late *Dr. Powell*.

Note on *Lathrodectus scelio* (Katipo).

About a year ago an occasional correspondent of mine, Mr. R. Allan Wight, forwarded to Washington specimens of *Lathrodectus scelio*, accompanied by examples of katipo. To his queries he received last January the following reply from Professor C. V. Riley: "The specimens which you obtained from Mr. Olliff of the Australian *Lathrodectus scelio* I am very glad to see. I showed them to Dr. George Marx, our acknowledged authority on spiders, and he states that there is no question that this is identical with *Lathrodectus scelio* of Koch. It is *undoubtedly* distinct from *Lathrodectus katipo*," &c.

As the apparently conjoint decision of Professor Riley and Dr. Marx differed from the opinion that I ventured to express on the subject in a paper contained in the Transactions of the New Zealand Institute, vol. xxiv., 1891, I forwarded to Professor T. Thorell examples of *Lathrodectus scelio* obtained from Queensland, New South Wales, and Tasmania, also fresh specimens of katipo—for which I am indebted to T. Kirk, Esq., F.L.S.—requesting his opinion as to whether they were identical or not. In the reply that he kindly furnished me with, dated 22nd June, 1892, he says, "I quite agree with you that *Lathrodectus katipo* and *L. scelio* is one and the same species. I have already expressed that opinion in my 'Ragni Malesi e Papuani,' iii., Ragni delle Austro-Malesia e del Cape York."

ART. XVII.—Notes on the New Zealand Bats.

By T. F. CHEESEMAN, F.L.S.

[Read before the Auckland Institute, 28th August, 1893.]

ONE of the most remarkable peculiarities of the fauna of New Zealand, and one which has been much commented upon, is the paucity of indigenous land-mammals. Only four have been catalogued—the dog, or "Maori dog," as it is usually called, the native rat, and two species of bats. And if we examine the subject carefully we shall find very good cause for believing that the two bats are the only land-mammals which can undoubtedly prove their claim to be considered aboriginal inhabitants of New Zealand. Take the case of the